

north of Mexico. Taxonomic Publications, South Lancaster, Massachusetts. 143 pp.

Tanner, V. M. 1959. Studies in the weevils of the western United States No. IX: Description of a new species of *Eucyllus* (Coleoptera: Curculionidae). Great Basin Nat., 19:53-55.

———. 1966. Rhynchophora Beetles of the Ne-

vada Test Site. Brigham Young Univ. Sci. Bull. Biol. Ser., 8:1-35.

Van Dyke, E. C. 1936. New species of North American weevils in the family Curculionidae, subfamily Brachyrhinae IV. Pan-Pacific Ent., 12:19-32.

Accepted for publication August 31, 1971.

TWO NEW SPECIES OF NORTH AMERICAN FLAT BUGS (HEMIPTERA: ARADIDAE)

NICHOLAS A. KORMILEV¹

ABSTRACT: Two new species of Aradidae are described.

Among unidentified material in the entomological collections of the Natural History Museum of Los Angeles County (LACM), I discovered specimens of the following two undescribed species of Aradidae.

SUBFAMILY ARADINAE

GENUS *Aradus* FABRICIUS, 1803

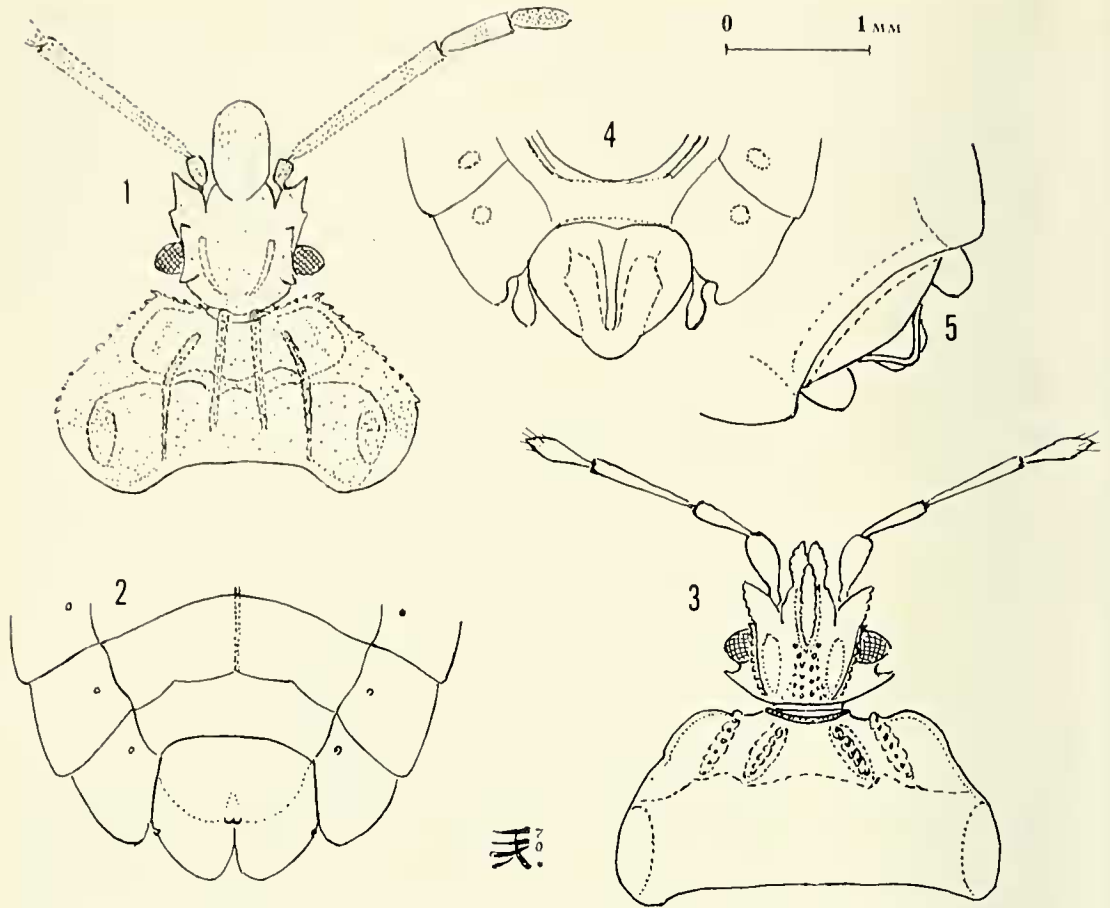
Aradus nevadensis, new species

Figures 1-2

Description: Male. Elongate ovate; head, pronotum, and scutellum finely granulate. *Head* longer than its width across eyes (1.27:1); anterior process strong, with parallel sides, reaching basal $\frac{1}{3}$ of antennal segment II; antenniferous tubercles acute, diverging, reaching apical $\frac{1}{3}$ of antennal segment I; lateral tooth small, but distinct; preocular tubercles acute, postocular also acute. Eyes reniform, strongly protruding. Depressions of vertex deep, converging backward in an arc. Antennae slender, almost twice as long as width of head across eyes (1.93:1); antennal segment II narrower than fore femora, gradually dilating toward the tip; relative length of antennal segments I to IV: 1:4.28:1.86:1.14. Labium reaching mesosternum. *Pronotum* less than half as long as its maximum width across middle of lateral borders (1:2.22); the latter strongly convex, rounded; straight and converging anteriorly, and bearing a few small

teeth. Disc raised before and behind deep, transverse depression; inner carinae parallel, very slightly diverging backward. *Scutellum* triangular, longer than its basal width (1.23:1); lateral borders slightly convex at base, then straight; raised. Tip narrowly rounded. Disc raised at basal $\frac{2}{5}$, transversely rugose on apical $\frac{3}{4}$. *Hemelytra* reaching apical $\frac{1}{4}$ of genital lobes; corium expanded and rounded laterally at base, reaching $\frac{1}{2}$ of connexivum V. *Abdomen* ovate; posteroexterior angles of connexiva II to IV not protruding, V and VI slightly protruding, VII forming rounded lobes; inner border of genital lobes slightly diverging behind middle. Sternum VI longer than VII medially (1.2:1). *Color* black to piceous on head, pronotum and scutellum, with exception of latero-posterior borders of pronotum and tip of scutellum, which are white or whitish. Antennal segments I, II, and basal $\frac{2}{3}$ of III, dark brown; apical $\frac{1}{3}$ of III whitish. IV black. Corium of hemelytra ochraceous mottled with whitish, infuscate on apical $\frac{2}{5}$; membrane fuscus, whitish at base. Connexivum dark brown with whitish posteroexterior angles and hind borders, the latter with a slight, reddish tinge in middle. Ventral side of body reddish brown, with whitish posteroexterior angles of connexiva. Legs dark brown; coxae and tips of tibiae, whitish. *Size*—total length 7.12

¹Natural History Museum of Los Angeles County, Los Angeles, California, 90007 (Present address: 102-34 93rd Avenue, Richmond Hill, New York 11418).



Figures 1-5. Fig. 1. *Aradus nevadensis*, n.sp., ♂, head and pronotum. Fig. 2, tip of abdomen from below. Fig. 3, *Mezira tropicalis*, n.sp., ♂, head and pronotum. Fig. 4, tip of abdomen from above; ♀. Fig. 5, tip of abdomen from above.

mm; width of pronotum 2.50 mm; width of abdomen 3.25 mm.

Diagnosis: *Aradus nevadensis*, n.sp. is similar to *A. cincticornis* Bergroth (Canadian Ent., 38:198-202, 1906), but it is larger, the head is longer than its width across eyes, antennal segment II is as long as the width of head including both eyes, sternum VI (V visible) is longer than VII (VI visible), and the color is different.

Holotype: Male. California, Nevada Co., Sagehen Creek, 18 June 1962 (R. L. Westcott) LACM.

SUBFAMILY MEZIRINAE

GENUS *Mezira* AMYOT AND SERVILLE, 1843

Mezira tropicalis, new species

Figures 3-5

Description: Male (Female identical except for differences where indicated). Elongate ovate, covered

with a fine, setigerous granulation, with setae extremely short and erect. **Head** slightly shorter than its width across eyes (male 1:1.07, female 1:1.15); anterior process slender, slightly constricted in middle and incised anteriorly, reaching apical $\frac{1}{4}$ of antennal segment I; antenniferous tubercles acute, diverging, reaching basal $\frac{1}{3}$ of antennal segment I; postocular small, acute, reaching outer border of eyes; the latter semiglobose, protruding. Vertex with V-form rows of setigerous granules. Antennae slender, less than twice as long as width of head across eyes (male 1:79:1, female 1.72:1); relative length of antennal segment I to IV: male 1:0.8:1.35:0.7, female 1:0.8:1.4:0.75. Labium reaching hind border of labial groove, the latter closed posteriorly. **Pronotum** trapezoidal, shorter than its maximum width (male 1:1.92, female 1:2.12); fore lobe is narrower than hind lobe (male 1:1.35, female 1:1.42); collar thin, straight anteriorly; anterolateral angles rounded, slightly expanded and reflexed, produced forward as far as collar;

lateral border parallel at humeri, converging and barely sinuate anteriorly; hind border almost straight. Fore disc with 4(2+2) high, granulate ridges; hind disc granulate; interlobal depression deep. *Scutellum* shorter than its basal width (male 1:1.30, female 1:1.42); lateral borders thinly carinate and slightly sinuate on apical half; tip rounded; disc with a thin median carina, areas laterad of latter granulate. *Hemelytra* reaching beyond fore border of tergum VII (δ), or reaching hind border of tergum VI (♀); apical angle of corium blunt, apical border convex, rounded. *Abdomen* ovate, longer than its maximum width across segment IV (male 1.33:1, female 1.41:1); connexivum wide and slightly raised laterally; posteroexterior angles of the connexiva II to VI slightly protruding, blunt; those of VII produced backward as rounded lobes, reaching $\frac{1}{2}$ of paratergites (δ), or rounded, reaching $\frac{1}{2}$ of tergum IX (♀). Paratergites (δ) thin, clavate, reaching apical $\frac{1}{3}$ of hypopygium; the latter cordate, with a thin median ridge, slightly shorter than disc of hypopygium. Paratergites (♀) large, rounded, reaching apical $\frac{1}{4}$ of slightly tricuspidate segment IX. Spiracles II to VII ventral, placed far from margin, VIII also ventral, but placed closer to margin and not visible from above. *Legs* unarmed. *Color* dark ferrugineous, connexivum

and venter ferrugineous. *Size*—total length: male 7.78, female 8.67 mm; width of pronotum: male 3.56, female 2.83 mm; width of abdomen: male 3.16, female 3.56 mm.

Diagnosis: *Mezira tropicalis*, n. sp. is closely related to *M. mexicana* Kormilev, (Proc. United States Nat. Mus., 119:245-258, 1964), from Vera Cruz, Mexico, but is larger, with the anterior process of the head longer and more slender; antennal segment III relatively longer, almost twice as long as IV; and paratergites (♀) longer, reaching to the apical $\frac{1}{4}$ of segment IX.

Holotype: Male, Mexico, Jalisco, 13 mi W Atenquique, 7800 ft, 13 July 1966 (J. R. Dixon and W. R. Heyer) LACM. *Allotype:* Female, 1 female paratype and 5 nymphs, same data as holotype.

ACKNOWLEDGMENT

For the privilege of studying the Aradidae in the collections of the Natural History Museum of Los Angeles County, I express my sincere thanks to Charles L. Hogue, Senior Curator of Entomology.

Accepted for publication November 16, 1971.

A NEW SPECIES OF AMBUSH BUG FROM ARIZONA (HEMIPTERA: PHYMATIDAE)

NICHOLAS A. KORMILEV¹

ABSTRACT: A new species of macrocephaline ambush bug from Arizona is described.

The ambush bugs are represented in the continental United States by two subfamilies, Phymatinae and Macrocephalinae. The first is common throughout the country, but the second is rather rare, being distributed mainly in the south and southwest, although *Macrocephalus prehensilis* (Fabricius), 1803, has been recorded as far north as Kentucky and Kansas (Evans, Ann. Ent. Soc. America, 24:711-736, 1931). While examining specimens of the latter subfamily in the collection of the Natural History Museum of Los Angeles County (LACM) and in a lot sent to me by T. Halstead, I found a few specimens of

an undescribed *Macrocephalus*, collected in Arizona.

In the description all measurements are given in millimeters. The first figure in a ratio represents the length and the second the width of the measured part. The length of the abdomen was measured from the anteroexterior angles of connexivum II to the tip of abdomen.

¹Natural History Museum of Los Angeles County, Los Angeles, California, 90007 (Present address: 102-34 93rd Avenue, Richmond Hill, New York 11418).